

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-011898**Date Inspected:** 09-Feb-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1630**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, G. Mundt			CWI Present:	Yes	No
Inspected CWI report:	Yes	No	N/A	Rod Oven in Use:	Yes	No N/A
Electrode to specification:	Yes	No	N/A	Weld Procedures Followed:	Yes	No N/A
Qualified Welders:	Yes	No	N/A	Verified Joint Fit-up:	Yes	No N/A
Approved Drawings:	Yes	No	N/A	Approved WPS:	Yes	No N/A
				Delayed / Cancelled:	Yes	No N/A
Bridge No:	34-0006			Component:	Hinge K Pipe Beams	

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

AG Machining (Boring, OR)

On this date, the QA Inspector arrived at AG Machine shop, to witness OIW switch out Fuse 120A-5 and Fuse 120A-3, for final machining. The QA Inspector arrived at approximately 1000 and witnessed Metro Machinery Rigging picking up the Fuse 120A-5, from the horizontal lathe. The QA Inspector witnessed Metro place two slings around the Fuse and attach to a forklift, with a hydraulic lifting boom. The QA Inspector witnessed Metro Machinery then placing this Fuse, on a flatbed trailer. The QA Inspector noted that two saddles with rubber cushions had been previously placed on the flatbed trailer. The QA Inspector then witnessed Metro personell using two come-a-longs to anchor the Fuse to the trailer. The QA Inspector witnessed Metro Personell placing rubber cushions on the interior of the Fuse and securing with more come-a-longs. The QA Inspector noted that the Fuse 120A-5 was being transferred back to OIW, after final machining and 100% penetrant testing was complete and OIW accepted. The QA Inspector then witnessed Metro picking up the Fuse 120A-3 from a separate trailer, utilizing two chokers. The QA Inspector then witnessed Metro placing the Fuse, into the horizontal lathe. The QA Inspector noted that the AG Machinist tightened the lathe chucks, to secure the Fuse in place. The QA Inspector noted that this Fuse 120A-3 had previously been at AG and Final "Trial" machining had been performed to within 1.5 mm of the final tolerance, per the contract requirements. The QA Inspector noted that the contract requires an outside diameter of 1920 mm (+/- 1mm). See attached pictures below.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

The QA Inspector then met with the AG Machinist and AG explained that OIW Machinist Matt Ackerson, had previously arrived on 2/5/10 to perform the FARO laser measurements, on the Fuse 120A-5. AG explained that the final length of the Fuse was measured at 3516 mm, with a tape measure and FARO measurement was also 3516 mm. The QA Inspector later notified Lead QA Inspector Joe Adame that OIW had previously performed the FARO measurements on the Fuse. QA Inspector Adame spoke with OIW PM Bill Pender and Mr. Pender explained that the following FARO Laser measurements were recorded: Finished outside diameter of 1920.88 mm and the cylindrical deviation was measured at .28 mm. QA Inspector Adame explained that Mr. Pender had provided a copy of the FARO testing results. The QA Inspector noted that the above mentioned FARO measurements, on this Fuse 120A-5, appeared to be in compliance with the specified tolerances, per the contract requirements.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project. The QA Inspector observed at Oregon Iron Works: 3 OIW production personnel and 2 QC Inspectors.

QA Inspector observed at AG Machine shop: 1 AG machinist, 1 AG supervisor and 4 METRO personell.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By:	Vance,Sean	Quality Assurance Inspector
Reviewed By:	Adame,Joe	QA Reviewer
